

2.6 LINEAR INEQUALITIES IN TWO VARIABLES

CHECK WHETHER THE GIVEN ORDERED PAIRS ARE SOLUTIONS OF THE INEQUALITY.

Ex 1 $y < -9x + 7$; $(-2, 2)$, $(3, -8)$

$$2 < -9(-2) + 7$$

$$-8 < -9(3) + 7$$

$$2 < 18 + 7$$

$$-8 < -27 + 7$$

$$2 < 25$$

$$-8 < -20$$

$(-2, 2)$ YES

$(3, -8)$ NO

Ex 2 $19x + y \geq -0.5$; $(2, 3)$, $(-1, 0)$

$$19(2) + 3 \geq -0.5$$

$$19(-1) + 0 \geq -0.5$$

$$38 + 3 \geq -0.5$$

$$-19 + 0 \geq -0.5$$

$$41 \geq -0.5$$

$$-19 \geq -0.5$$

$(2, 3)$ YES

$(-1, 0)$ NO

Homework: Worksheet 2.6 B #1-6